## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(	s):	Yu et al.	OIPA			
Application	n No.:	10/038,517	APR 1 9 2002 55			
Filed:		01/03/02	OFFICE SEE	Group Art U	nit: 1621	
Title: Encoding t		Human Lipas	e and Polynucleotide	es Examiner:	To Be Assigned	
Attorney D	ocket No.	: LEX-0293-U	JSA			
Commissior Washington Box DD		31	TION DISCLOSUR	E STATEMENT	<b>20</b> ⊗	RECEIVED
Dear Sir:					2002 1600/2	VΕ
This	Informatio	on Disclosure	Statement is submitte	ed:	2900	D
<u>X</u>	(Within t		or f filing national appl nailing date of first o		•	
	Certi a \$24 (Afte	fication under 40.00 fee unde	ogether with either a 37 CFR 1.97(e), or er 37 CFR 1.17(p), or 7(b) time period, but first)		on or notice of allow	vance,
	Certi a pet a \$13 (File	fication under ition under 37 30.00 petition	ogether with a: 37 CFR 1.97(e), and CFR 1.97(d)(2)(ii), fee set forth in 37 CF etion or notice of allo ue fee)	and FR 1.17(i)(1).	er occurs first, but be	efore

X Applicant(s) submit herewith Form PTO 1449-Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s)

believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

Applicant submits that the above references taken alone or in combination neither anticipate nor render obvious the present invention. Consideration of the foregoing in relation to this application is respectfully requested.

It is requested that the information disclosed herein be made of record in this application.

Respectfully submitted,

April 16, 2002

Date

Lance K. Ishimoto

Reg. No. 41,866

LEXICON GENETICS INCORPORATED (281) 863-3333

24231
PATENT TRADEMARK OFFICE

Sheet

proved for use through 10

Patent an emark Office, U.S. DEPART
s are required to respond to a collection of information unless it displays a valid OMB control number.

the Paperwork Reduction Act or 1995, no persons are required to rest	ond to a collection of information differs it displays a valid Clark control of
Substitute for form 1449A PTO	Complete if Known

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

of

3

Application Number 10/038,517

Filing Date 01/03/02

First Named Inventor Yu

Group Art Unit 1621

Examiner Name To be assigned

Attorney Docket Number LEX-0293-USA

	APR	- 1002		U.S. PATENT DOCUMEN	TS	
Examiner Initials*	No. 2 /	U.S. Patent I	Document Kind Code <sup>2</sup> (if known)	Name of Patentee or Applicant of Cited Document	Date of Publication of cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	AA	4,215,051		Schroeder et al	07/29/80	
	AB	4,376,110		David et al	03/08/83	
	AC	4,594,595		Struckman	06/10/86	
	AD	4,631,211		Houghten	12/23/86	
	AE	4,689,405		Frank et al	08/25/87	
	AF	4,713.326		Dattagupta et al	12/15/87	
	AG	4,873,191		Wagner et al	10/10/89	
	AH	4,946,778		Ladner et al	08/07/90	
	Al	5,252,743		Barrett et al	10/12/93	
	AJ	5,272,057		Smulson et al.	12/21/93	
	AK	5,424,186		Fodor et al	06/13/95	m
	AL	5,445,934		Fodor et al	08/29/95	유
	AM	5,459,127		Felgner et al	10/17/95	
	AN	5,556,752		Lockhart et al	09/17/96	W × O
	AO	5,700,637		Southern	12/23/97	—
	AP	5,744,305		Fodor et al	04/28/98	<del></del>
	AQ	5,830,721		Stemmer et al	11/03/98	\$ 10 K
	AR	5,837,458		Minshull et al	11/17/98	S A III
	AS	5,858,755		Lowe	01/12/99	/ <u>28</u> 0
	AT	5,869,336		Meyer et al.	02/09/99	
	AU	5,877,397		Lonberg et al	03/02/99	
	AV	5,948,767		Scheule et al.	09/07/99	
	AW	6,075,181		Kucherlapati et al	06/13/00	
	AX	6,110,490		Thierry	08/29/00	
	AY	6,150,584		Kucherlapati et al.	11/21/00	
					<del> </del>	
					<del>                                     </del>	

Examiner	Date	
Signature	Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>\*</sup>EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



PTO SB.08B (10-96) Approved for use through 10/31/99 OMB 0651-0031 Trademark Office, U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number Substitute for form 1449B PTO Complete if Known INFORMATION DISCLOSURE Application Number 10/038.517 Filing Date 01/03/02 STATEMENT BY APPLICANT Yu First Named Inventor 1621 Group Art Unit , sheets as necessary) Examiner Name To be assigned Sheet of 3 Attorney Docket Number LEX-0293-USA

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
_	ΑZ	Bird et al, 1988, "Single-Chain Antigen-Binding Proteins", Science 242:423-426.	
	ВА	Bitter et al, 1987, "Expression and Secretion Vectors for Yeast", Methods in Enzymology 153:516-544.	
_	вв	Colbere-Garapin et al, 1981, "A New Dominant Hybrid Selective Marker for Higher Eukaryotic Cells", J. Mol. Biol. 150:1-14.	
	вс	Gautier et al, 1987, "α-DNA IV:α-anomeric and β-anomeric tetrathymidylates covalently linked to intercalating oxazolopyridocarbazole. Synthesis, physiochemical properties and poly (rA) binding", Nucleic Acids Research 15(16):6625-6641.	
	BD	Gordon, 1989, "Transgenic Animals", International Review of Cytology, 115:171-229.	
	BE	Greenspan et al, 1993, "Idiotypes: structure and immunogenicity", FASEB Journal 7:437-444.	
	BF	Gu et al, 1994, "Deletion of a DNA Polymerase $\beta$ Gene Segment in T Cells Using Cell Type-Specific Gene Targeting", Science 265:103-106.	
	BG	Huse et al, 1989, "Generation of a Large Combinatorial Library of the Immunoglobulin Repertoire in Phage Lambda", Science 246:1275-1281.	
	вн	Huston et al, 1988, "Protein engineering of antibody binding sites: Recovery of specific activity in an anti-digoxins ingle-chain Fv analogue produced in Escherichia coli", Proc. Natl. Acad. Sci. USA 85:5879-5883.	
	ВІ	Inoue et al, 1987, "Sequence-dependent hydrolysis of RNA using modified oligonucleotide splints and R Nase FEBS Letters 215(2):327-330.	
	BJ	Inoue et al, 1987, "Synthesis and hybridization studies on two complementary nona(2'-O-methyl)ribonucleotides Nucleic Acids Research 15(15):6131-6149.	
	ВК	Inouye & Inouye, 1985, "Up-promoter mutations in the lpp gene of Escherichia coli", Nucleic Acids Research 1679):3167-3110.	
	BL	Janknecht et al, 1991, "Rapid and efficient purification of native histidine-tagged protein expressed by recombinant vaccinia virus", PNAS 88:8972-8976.	
	вм	Kohler & Milstein, 1975, "Continuous cultures of fused cells secreting antibody of predefined specificity", Nature 256:495-497.	
	BN	Lakso et al, 1992, "Targeted oncogene activation by site-specific recombination in transgenic mice", Proc. Natl. Acad. Sci. USA 89:6232-6236.	
	во	Lavitrano et al, 1989, "Sperm Cells as Vectors for Introducing Foreign DNA into Eggs: Genetic Transformation of Mice", Cell 57:717-723.	
	BP	Lo, 1983, "Transformation by Iontophoretic Microinjection of DNA: Multiple Integrations without Tandem Insertions", Mol. Cell. Biology 3(10):1803-1814.	
	BQ	Logan et al, 1984, "Adenovirus tripartite leader sequence enhances translation of mRNAs late after infection", Proc. Natl. Acad. Sci. USA 81:3655-3659.	
	BR	Lowy et al, 1980, "Isolation of Transforming DNA: Cloning the Hamster aprt Gene", Cell 22:817-823.	Γ

Examiner	Date	
Signature	Considered	

EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer. Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>1</sup> Unique citation designation number. 2 See attached Kinds of U.S. Patent Documents. 3 Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.



oved for use through 10/31/99 OMB 0651-0031 nark Office, U.S. DEPARTMENT OF COMMERCE Patent and Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number

Substitute for form 1449B.PTO				Complete if Known		
INFO	I MORTAMS	אפור	CLOSURE	Application Number	10/038,517	
INFORMATION DISCLOSURE STATEMENT BY APPLICANT				Filing Date	01/03/02	
				First Named Inventor	Yu	
( APF	(use as many sheets			Group Art Unit	1621	
12	(use as many sheets	as nec	essary)	Examiner Name	To be assigned	
Sheet 3			3	Attorney Docket Number	LEX-0293-USA	
1	1:000					

		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	_
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	Т
	BS	Morrison et al, 1984, "Chimeric human antibody molecules: Mouse antigen-binding domains with human constant region domains", Proc. Natl. Acad. Sci. USA 81:6851-6855.	
	ВТ	Mulligan & Berg, 1981, "Selection for animal cells that express the Escherichia coli gene coding for xanthine-guanine phosphoribosyltransferase", Proc. Natl. Acad. Sci. USA 78(4):2072-2076.	
	BU	Neuberger et al, 1984, "Recombinant antibodies possessing novel effector functions", Nature 312:604-608.	Γ
	в٧	Nisonoff, 1991, "Idiotypes: Concepts and Applications", J. of Immunology 147:2429-2438.	
	вw	O'Hare et al, 1981, "Transformation of mouse fibroblasts to methotrexate resistance by a recombinant plasmid expressing a prokaryotic dihydrofolate reductase", Proc. Natl. Acad. Sci. USA 78(3):1527-1531.	
	вх	Ruther et al, 1983, "Easy identification of cDNA clones", EMBO Journal 2(10):1791-1794.	
	BY	Santerre et al, 1984, "Expression of prokaryotic genes for hygromycin B and G418 resistance as dominant-selection markers in mouse L cells", Gene 30:147-156.	
	BZ	Sarin et al, 1988, "Inhibition of acquired immunodeficiency syndrome virus by oligodeoxynucleoside methylphosphonates", Proc. Natl. Acad. Sci. USA 85:7448-7451.	Γ
	CA	Smith et al, 1983, "Molecular Engineering of the Autographa californica Nuclear Polyhedrosis Virus Genome: Deletion Mutations within the Polyhedrin Gene", J. Virol. 46(2):584-593.	Γ
	СВ	Stein et al, 1988, "Physiochemical properties of phosphorothioate oligodeoxynucleotides", Nucleic Acids Research 16(8):3209-3221.	
	СС	Szybalska & Szybalski, 1962, "Genetics of Human Cell Lines, IV. DNA-Mediated Heritable Transformation of a Biochemical Trait", Proc. Natl. Acad. Sci. USA 48 2026-2034.	
	CD	Takeda et al, 1985, "Construction of chimaeric processed immunoglobulin genes containing mouse variable and human constant region sequences", Nature 314:452-454.	Γ
	CE	Thompson et al, 1989, "Germ Line Transmission and Expression of a Corrected HPRT Gene Produced by Gene Targetin Embryonic Stem Cells", Cell 56:313-321.	6
	CF	Van Der Putten et al, 1985, "Efficient insertion of genes into the mouse germ line via retroviral vectors", Proc. Natl. Acad. Sci. USA 82:6148-6152.	
	CG	Van Heeke et al, 1989, "Expression of Human Asparagine Synthetase in Escherichia coli", J. Biol. Chemstry 264(10):5503-5509.   ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	
	СН	Ward et al, 1989, "Binding activities of a repertoire of single immunoglobulin variable domains secreted come between this coli", Nature 341:544-546.	
	CI	Wigler et al, 1977, "Transfer of Purified Herpes Virus Thymidine Kinase Gene to Cultured Mouse Cells", Cell 1★223-232	
	CJ	Wigler et al, 1980, "Transformation of mammalian cells with an amplifiable dominant-acting gene", Pro latt. Read. 50. USA 77(6):3567-3570.	
		<u> </u>	L

Teb 11			
Examiner	•	Date	
Signature		Considered	

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer. Patent and Trademark Office. Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

<sup>\*</sup>EXAMINER: Initial reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>&</sup>lt;sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). 4 For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. 5 Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.